



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,593	08/05/2003	Tomomi Hase	461-145	4813

23117 7590 05/30/2006

NIXON & VANDERHYE, PC  
901 NORTH GLEBE ROAD, 11TH FLOOR  
ARLINGTON, VA 22203

EXAMINER
----------

NGUYEN, CAM N

ART UNIT	PAPER NUMBER
----------	--------------

1754

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/633,593

Applicant(s)

HASE ET AL.

Examiner

Cam N. Nguyen

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03/09/06 (an amendment & a T.D.).
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4 and 7-18 is/are rejected.
- 7) ☒ Claim(s) 2,3,5 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on originally filed is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### **Response to Amendment**

1. Applicants' amendment and remarks, filed March 09, 2006, has been made of record and entered. Claims 1, 7, 10-11, 13, 16, & 18 have been amended.

Claims 1-18 are currently pending and under consideration.

### **Terminal Disclaimer**

2. The terminal disclaimer filed on March 09, 2006 disclaiming the terminal portion of any patent granted on this application, which would extend beyond the expiration date of **US Application 10/290,325** has been reviewed and is accepted. The terminal disclaimer has been recorded.

### **Claim Rejections - 35 USC § 102(b)**

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4, 7, 11, & 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Ozawa et al., "hereinafter Ozawa", (US Pat. 5,075,276).

Ozawa discloses a catalyst, which comprises a support substrate, a catalyst

Art Unit: 1754

carrier layer formed on said support substrate and catalyst ingredients loaded on said catalyst carrier layer; wherein said catalyst carrier layer comprises: a high surface area material selected from the group consisting of alumina and titanium oxide, cerium oxide, zirconium oxide, and at least one oxide of a rare earth element other than cerium and lanthanum, etc. (see col. 7- col. 8, claim 1). The support substrate is a honeycomb-shape monolithic catalyst support substrate or a pellet-shape support substrate (see col. 8, claim 9). The support substrate comprises one selected from the group consisting of cordierite, mullite, alumina, magnesia, spinel, etc. (see col. 8, claim 10). The catalyst ingredients are at least one selected from the group consisting of Pt, Pd, Ir, Ru, Os, Cr, Ni, V, Cu, Co, and Mn (see col. 8, claim 11).

There is no patentable distinction seen between the claimed catalyst and the disclosed catalyst, thus anticipates the claims.

**Claim Rejections - 35 USC § 103**

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 8-10 & 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozawa et al., "hereinafter Ozawa", (US Pat. 5,075,276), as applied to claims 1, 4, 7, 11, & 18 above, and further in view of European Patent, "hereinafter EP '067" (EP 1 043 067 A2) or Japanese Patent, "hereinafter JP '128", (JP 2001310128).

Ozawa discloses a catalyst as described above, except for the claimed ceramic support material.

It would have been *prima facie obvious* to one of ordinary skill in the art at the time the invention was made to have substituted the cordierite of EP '067 for the cordierite of Ozawa because it is known and taught by EP '067 (see EP, abstract), and it has been held by the court that substitution of an equivalence for the same purpose is *prima facie obvious* involves only within the level of ordinary skill in the art to do so.

#### **Allowable Subject Matter**

7. Claims 2-3 & 5-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### **Response to Applicants' Arguments**

8. Applicants' amendment and remarks filed on March 09, 2006 has been fully considered, but not deemed persuasive for the same reasons as set forth in last office action.

Applicants' further urging, that the Ozawa reference does not teach the claimed catalyst body comprising primary catalyst component and a co-catalyst component loaded onto a ceramic support through an ionic bond or nano-crack, etc. (applicants' response on page 6, 3<sup>rd</sup> paragraph), is noted. It would appear that applicants are arguing the specific technique or process of preparing the claimed catalyst body.

Art Unit: 1754

However, since the claims are drawn to a product, and that only the product limitations in the claims are determined the patentability. The instant claims simply require "a ceramic catalyst body comprising a catalyst component and a co-catalyst component loaded onto a ceramic support, which is also loaded onto a ceramic base material" and Ozawa teaches all of the claimed catalyst components, the claims are anticipated by the reference. The claimed catalyst body does not appear to distinguish from the disclosed catalyst. Thus, the rejections are maintained.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

#### **Conclusion**

10. Claims 1-18 are pending. Claims 1, 4, & 7-18 are rejected. Claims 2-3 & 5-6 are objected. No claims are allowed.


Art Unit: 1754

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cam N Nguyen, whose telephone number is 571-272-1357. The examiner can normally be reached on M, W, R, & F, 9:00 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen/cnn  
May 23, 2006

  
CAM N NGUYEN  
PRIMARY EXAMINER

Art Unit - 1754